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SCARBOROUGH CASTLE.

RUINS OF SCARBOROUGH CASTLE, YORKSHIRE.

THE town of Scarborough is situated in the recess of a beautiful bay on the shore of the German Ocean, and occupies nearly a central position between Flamborough Head and Whitby in Yorkshire. The concave slope of this bay, and the picturesque appearance of the town, as it rises from the shore in a sort of amphitheatre, together with the imposing ruins of a venerable castle, which stand on the summit of a lofty promontory, have attracted much admiration for Scarborough. Then there is a magnificent expanse of ocean, where ships are often passing, and at the recess of the tide, there is a spacious area upon the sands equally convenient for exercise and sea-bathing. The hilly nature of the country affording diversity and shadow, the fine breezes from the ocean, so delightful in the heat of summer, with the various advantages to be obtained by visitors in the town and neighbourhood, contribute to render Scarborough a favourite and a very charming summer retreat. There is also an additional attraction to the place by the discovery of the celebrated mineral waters, thus related by the historian of the town.

Mrs. Farrow, a sensible and intelligent lady who lived at Scarborough about the year 1620, sometimes walked along the shore, and observing the stones, over which the waters passed, to have received a russet colour, and finding the water to have an acid taste, different from the common springs, and to receive a purple tincture from galls, thought it might probably have a medicinal property. Having therefore made an experiment herself, and persuaded others to do the same, it was found to be efficacious in some complaints, and became the usual physic of the inhabitants. It was afterwards in great reputation with the citizens of York, and the gentry of the county, and, at length, was so

generally recommended, that several persons of quality came from a great distance to drink it; preferring the waters of this Spa, before all the others they had formerly frequented, even the Italian, French, and German.

The origin of Scarborough is unknown, but its ancient name of Scarburg is of Saxon derivation, and signifies rock-fortress. Mr. Allen thinks there is reason to believe it has been a Saxon town, perhaps on a Roman foundation. The distance of Scarborough from York is forty miles, and from London, by way of Lincoln, two hundred and seventeen miles. Scarborough consists of the upper and lower town. The principal streets in the upper town are spacious and well-paved; and there are some new buildings on the cliff, in a situation perhaps unrivalled, having in front a fine terrace nearly a hundred feet above the level of the sands, and commanding a variety of delightful prospects. The church of Scarborough was formerly a magnificent and spacious structure. In the reign of Henry the Eighth it was thus described by Leland:

Ther is but one paroche chirch in the toune, of our Ladie, joyning almost to the castelle; it is very faire, and isled on the sides, and cross-isled, and hath three auncient towres for belles, with pyramides on them, whereof two towres be at the weste ende of the chirch, and one in the middle of the crosse isle. There is a greate chapelle by side by the Newborow gate.

Neither of these three towers mentioned by Leland now remains; the central tower fell in 1659, doing much injury to the nave; but at what period the two western towers were demolished is not ascertained. The extensive ruins and foundations which surround the remaining portion of the church, prove that it must have been a vast edifice when in its original state. The present steeple, which now stands at the east end of the church, occupies the site of the ancient central tower. The ruins of the chancel are still seen in the eastern part of the churchyard. The church was dedicated to St. Mary, and formerly belonged to the Cistercian Monastery, the abbot of which was rector of Scarborough.

But it is to the ancient and stupendous castle that we would direct the reader's particular attention. This fabric, now a majestic ruin, was once the pride and glory of Scarborough. It was built in the reign of King Stephen, by William le Gros, earl of Albemarle and Holderness. The situation chosen was certainly a most commanding one. Elevated more than three hundred feet on the southern, and three hundred and thirty on the northern side, above the level of the sea, and presenting to the north, the east, and the south, a vast range of perpendicular and completely inaccessible rock, this fortress might well be deemed, before the invention of artillery, wholly impregnable. The western aspect consists of a steep rocky slope commanding the town and the bay, while the level area at the top of the hill consists of nineteen acres of excellent soil, gently sloping from the northern to the southern side.

By referring to the history of this castle, we find that it was here that Piers de Gaveston, the unhappy favourite of Edward the Second, sought refuge against the exasperated barons, but after a short siege was obliged to surrender for want of supplies. It was here that Stafford, in 1553, played his successful stratagem which gave him the possession of the stronghold for a brief period. Being induced to enter into Wyatt's conspiracy against the bigoted and cruel Mary, this young man, the second son of Lord Stafford, collected some fugitives who, like himself, had taken refuge in France, and returning with them to England, and disguising them like peasants and countrymen, went with them to Scarborough, on a market day, under the most unsuspicious appearances. Stafford, as a peasant, found easy admittance to the castle, and strolled about with a careless air, apparently to gratify his curiosity. About thirty of his men also entered without the least suspicion, and embracing a favourable opportunity instantly secured the different centinels, took possession of the gate, and admitted their remaining companions who bore concealed arms. The triumph was of short duration, for the Earl of Westmoreland recovered the castle at the end of three days, and Stafford with three of his associates were punished, on conviction of high treason, with death. This affair led to the introduction of a common proverb: "Scarborough warning; a word and a blow, and the blow comes first."

In the reign of Charles the First, this castle was twice besieged and taken by the parliamentary army. The first siege lasted for twelve months. The castle was at length dismantled by order of parliament, but on the breaking out of the rebellion in 1745, it underwent a temporary repair, and when the danger was over the barracks, as now standing, were erected. These consist of twelve apartments, and will accommodate one hundred and twenty soldiers. At a later period three batteries were built for the protection of the town and harbour.

The approach to the castle is by a gateway, on the summit of a narrow isthmus on the western side above the town. The drawbridge was just within this gate, and under it there is a deep fosse which extends along the foot of the western declivity of the castle hill. Within the drawbridge is a narrow ascent to the keep, or prison, a lofty square tower of Norman architecture, which is described as being ninety-seven feet high, while in its original state its height can scarcely have been less than one hundred and twenty feet, having been crowned with an embattled parapet. The walls are twelve feet thick, cased with square stone; the mortar has become more solid and durable than even the stone itself. The different stories have been vaulted and divided by strong arches; those of the windows are semicircular, supported by round pillars. The area in which the tower is situated contains above half an acre of ground. From hence to the southern extremity of the castle yard, the summit of the hill was defended on the western side by an embattled wall, flanked with numerous semicircular towers with apertures, from whence missiles were discharged; but these towers are now falling into rapid decay. Ponderous pieces of timber are said to have been rolled down on an enemy from this height.

The mineral waters, above alluded to, have now been in repute for nearly two centuries. The spa-house is at the foot of the cliff, on the sea-shore. There are two wells, the north or chalybeate well, and the south or saline well.

An extraordinary sinking of the cliff, above the spa-house, took place in the month of December, 1737, and gave reason to fear that the springs were lost. Nearly an acre of pasture land, with the cattle grazing upon it, sunk perpendicularly several yards, and as the ground sank, the earth or sand under the cliff rose out of its natural position, above a hundred yards in length, and in some places was forced up six or seven yards above its former level. A large body of stone, bound with timber, forming the staith of the spa, the weight of which was computed at two thousand four hundred and sixty tons, rose twelve feet higher than its former position, and was forced about twenty yards forward towards the sea. The spa wells ascended with the earth and sand, but the water ceased running into them, and seemed for a time to be lost. By diligent search the springs were at length recovered, and the staith being repaired, the spa continued to enjoy its accustomed reputation.

The harbour of Scarborough is the only safe port between the Humber and Tinemouth Haven, where ships of large burden can find refuge in violent gales of wind from the east. Many valuable cargoes, and numerous lives, have been saved by means of its friendly

shelter. At full tide it is easy of access for considerable vessels, the depth of the water at the extremity of the pier being from twenty to twenty-four feet, though at low water it is only three or four feet. The pier at Scarborough is of extraordinary dimensions, in order to resist the force of the waves in that exposed situation. It sweeps into the sea, embracing the larger portion of a circle, and at the curvature where there is the greatest force of the waves, the foundation of the pier is sixty-three feet in breadth.

In consequence of its peculiar situation, the harbour of Scarborough is liable to be much encumbered by sand, and as there is no natural stream to counteract its effects, it gradually accumulates beyond the power of art to check it in any effective degree. The following is Mr. Allen's account of this circumstance:

The floating sand, brought in by the tide, subsiding by its gravity in still water, gradually accumulates, and the more quiescent the state of the harbour, the greater the accumulation. The agitation of the sea, in strong gales of wind from the east, is the most powerful agent for cleansing; hence we find that, by the action of the waves, in the storms of winter, the sand collected in the moderate weather is in a great degree removed; otherwise, the harbour would, in the process of time, be entirely choked up. Some idea may be formed of the alarming progress of the encroaching sand, by reflecting that Quay street has evidently formed part of the old harbour, mooring posts having been discovered in the cellars of some of the houses in that situation, and it is within the memory of some old men yet living, when fish were taken with angling lines, towards high water, from the staith on the sands, where the sea now scarcely washes at high spring tides.

Before we take leave of Scarborough, we must remark that the visitor at this attractive spot is delighted with the diversity and richness of the scenery around, as well as by the magnificent sea-view that is presented to him. Towards the north elevated moors raise their bleak and barren summits, as if to give the charm of contrast to the highly cultivated country to the westward. The southern boundary of the landscape is formed by the Wold Hills in the East Riding of Yorkshire. The summit of Oliver's Mount, about a mile from the town of Scarborough, forms one of the most delightful terraces in England, at an elevation of five hundred feet above the level of the sea. This eminence commands a most magnificent view.

ON INSECTS WHICH ARE INJURIOUS TO THE FARMER.

VI.

The Corn Weevil,

Calandra granaria, (Clairville,) *Curculio granaria*, (Linnæus.)

Among the most injurious insects with which corn is infested, the farmer will doubtless reckon the *Corn Weevil*, that insidious enemy whose attacks are for a long time concealed from view, and who goes on with his work of destruction while the grains on which he is feeding have the appearance of being perfectly whole and sound.

The insects known as weevils are exceedingly numerous, forming a most extensive group, but one that is easily recognised by certain peculiarities belonging to it. No fewer than five hundred species are described as inhabiting Britain, so that it is no matter for surprise that we are sufferers in various ways from their ravages. The habits and economy of the Nut Weevil have already been described in our pages*, and we shall find that those of the Corn Weevil are very similar, although they must be considered in a more serious light, as affecting the interests of agriculture, and of the community at large. The larvæ of some species of weevil are subterranean, feeding on roots; others subsist on flowers, and are very injurious to fruit-trees in blossom; while a third portion feeds upon seeds of various kinds. Among the latter, none is better known to the agriculturist than the species we are about to describe, though to other persons the Nut Weevil is doubtless the most familiar.

The structure of the Corn Weevil does not materially differ from that of the Nut Weevil, which the reader will find represented in the article already referred to. The insect is of a brown or pitchy colour, when mature, but pale when first emerging from the pupa; the wing-cases are marked with deep punctured lines; the legs are rusty red. This insect infests granaries and other stores of corn, and the female buries herself in the heaps for the purpose of laying her eggs. Her method of doing this seems the most effectual that could have been taken for the security of her progeny, and for the destruction of the grain. She makes a very small opening in the skin of the grain, by means of the boring instrument which she bears on the fore-part of her head, and which is called the *rostrum;* into this hole she places a single egg, and then covers up the opening in so clever a manner, that no sign of the puncture remains. This she does by means of a glutinous matter with which she is provided. The parent insect seems as if endued with a knowledge of the fact that the contents of a single grain are just sufficient to maintain the larva throughout the period of its growth, and that if two eggs were deposited in one grain, the larvæ resulting therefrom would be half-starved. Thus she invariably places one egg only in each grain, and such is the number of eggs deposited by one female, that it has been calculated that her descendants may amount, in a single season, to 23,600 individuals. Soon after this the parent insect dies, while the eggs, according to the state of the temperature, are more or less quickly hatched. Under favourable circumstances, only a few days elapse before a small white maggot issues from the egg, and begins feeding on the farinaceous substance by which it is surrounded. The body of this minute creature is very soft, but the head is of firmer consistency, supporting a pair of strong jaws. With these it gradually enlarges its abode by eating away the internal portions of the grain, but as the maggot grows just in proportion as the substance of the grain is demolished, so there is no shrivelled appearance in the outer coat, nor any token to indicate to the eye that the corn is unsound. At length the whole of the interior is scooped out, and the larva occupies the space with its own body; but by this time it is prepared to change into the pupa or chrysalis state. The pupa is also white, and transparent, and lies without motion in its cell until the period of its final transformation, when it becomes a perfect insect, and makes its escape by gnawing a hole in its prison, and leaving behind it an empty husk, instead of a well-filled grain. The time occupied by these changes cannot be stated with certainty, because it is so much influenced by the state of the weather. The average duration of the life of the insect from the egg to the perfect state has been estimated at from forty to forty-five days. In the south of France these insects rapidly increase from the month of April until September, but in this country they are vigorous only during the warmer months of summer. The southern districts of England are more subject to the attacks of this insect than the northern. In Scotland the Corn Weevil seldom occasions serious damage. Mr. Duncan, in his excellent description of this insect, (*Quarterly Journal of Agriculture*, Vol. IX.,) expresses his belief that a portion of the injury done to grain by the Corn Weevil is effected by the perfect insect. Although the larva is of course the principal cause of this injury, the perfect insects take likewise a direct share in it by gnawing the grains. It has, indeed, been denied by some observers that they ever do this, except when making an opening for the admission of the egg; but it is utterly improbable that they should for

* See *Saturday Magazine*, Vol. XVII., p. 116.

such a length of time frequent places where they can have access to no other kind of food without using the grain as such. In this condition, however, probably very little food suffices, and the injury done consists rather in the frequent breaking of the skin of the grain, than in the actual quantity of its substance consumed.

Such being the habits of the insect, it next becomes important to inquire for a preventative of the evil it inflicts. The presence of the enemy within the grains is at once detected, if the corn be immersed in water; for the infected portion, being deprived a portion of its farina, floats on the surface. The removal of the bad from the good would be no easy task in an extensive granary, but Mr. Duncan suggests that if the whole of the corn were passed through a winnowing machine, it is probable that the damaged portion would be thrown out, in the same manner as the chaff and light corn are in an ordinary case.

But we may here relate the experience of William Mills, Esq., F.L.S., &c., who, in a memoir to the Entomological Society, describes his observations on the Corn Weevil made during his stay at Madeira in 1835. This gentleman differs from Shaw and other writers, in his view of the mode taken by the parent insect in laying its eggs, being, as he says, "pretty certain" that in Indian corn the animal lays its eggs in the blossom, and that the corn is formed with the egg in its heart. Mr. Mills examined very many grains for several days, and most minutely with a microscope, and could discover no signs of perforation any where, although the chrysalis was evidently in the centre. He then cut the grain open, and took out the chrysalis, but could still discover no wound of any nature in the corn itself, by which it could have been lodged from without.

The experiments, however, to which we here call attention, were those by which Mr. Mills ascertained what heat would prove fatal to the insects. Placing the chrysalis in a temperature of 110° Fahrenheit, he succeeded in hatching it, but he found that a temperature of from 130° to 140° destroyed it.

A gentleman of the name of Wilkinson (he observes) has now established a heated room with hot water pipes, in which he receives eight hundred bags of wheat at a time; these become heated through at about 135°, and the wheat, when re-sifted, is perfectly cleansed from these noxious insects, and makes quite as good bread as before. I also tried some of it in the ground, that had been subjected to this heat, and it came up.

Mr. Duncan mentions the following scheme, as being the most approved of those which have been tried for the purpose of destroying the perfect insect, before it has had time to lay its eggs. When the insects that have passed the winter in a torpid state are beginning to recover their activity, and to move about among the grain, a small heap of barley should be placed apart as a decoy, while the principal store should be turned over and tossed about as much as possible. As these insects are naturally fond of quiet, they will, if this treatment be repeated at intervals, leave the principal store and repair in great numbers to the small heap, where they are undisturbed. As soon as a sufficient quantity has accumulated there, the small heap is to be saturated with boiling water, which will instantly incapacitate them from further mischief. The corn of the decoy heap may be separated from the dead insects by sifting. This method, though it does not seem to promise any great amount of success, has yet been found to answer extremely well, and it must be remembered that the destruction of one perfect insect is of more consequence than that of many larvæ.

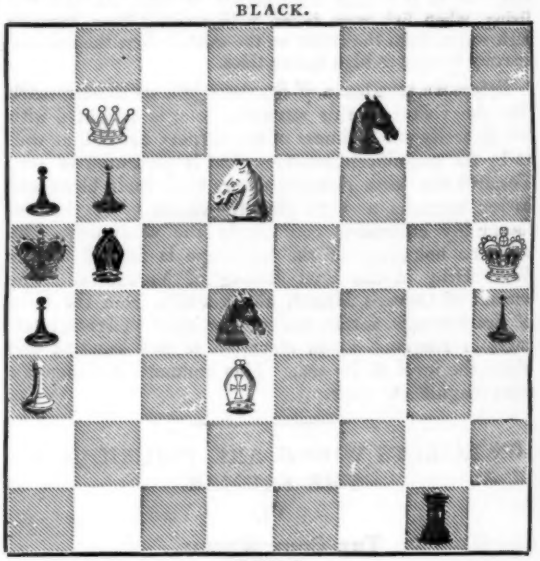
Good ventilation, and frequent shifting of the grain, are very important, as the agriculturist has probably often experienced. But whatever attention may be paid to this, the production of the Corn Weevil cannot be hindered in situations where it breeds freely, unless indeed it were possible to keep down the temperature of the granary below the point at which the eggs are hatched, and this, during the hotter months, could scarcely ever be accomplished. Should any of our agricultural readers be acquainted with a method of destroying the Corn Weevil, which by his own experience he has proved superior to any of those above named, he will oblige us by transmitting an account of the same, which it may probably be desirable to make more widely known.

CURIOUS CHESS PROBLEM.

THE young student who has bestowed some attention on our *Easy Lessons in Chess*, ought by this time to be in a condition to solve most problems, in which the mate is required to be given on the second or third move. An ordinary chess player would probably smile, if he were told of a very difficult problem in two or three moves, but we sometimes meet with such problems, which, though the solution be strictly consonant with the laws of the game, yet require an artifice, on the part of the first player, which is often difficult to discover. The following is such a problem. It occurs in the last number of *Le Palamède*, a French periodical, devoted chiefly to chess.

White to move, and to give checkmate on second move.

BLACK.



WHITE.

AMONG the different conditions and ranks of men, the balance of happiness is preserved in a great measure equal; and the high and the low, the rich and the poor, approach, in point of real enjoyment, much nearer to each other than is commonly imagined. In the lot of man, mutual compensations, both of pleasure and of pain, universally take place. Providence never intended that any state here should be either completely happy, or entirely miserable. If the feelings of pleasure are more numerous and more lively, in the higher departments of life, such also are those of pain. If greatness flatters our vanity, it multiplies our dangers. If opulence increases our gratifications, it increases, in the same proportion, our desires and demands. If the poor are confined to a more narrow circle, yet within that circle lie most of those natural satsfactions which, after all the refinements of art, are found to be the most genuine and true. In a state therefore, where there is neither so much to be coveted on the one hand, nor to be dreaded on the other, as at first appears, how submissive ought we to be to the disposal of Providence! How temperate in our desires and pursuits! How much more attentive to preserve our virtue, and to improve our minds, than to gain the doubtful and equivocal advantages of worldly prosperity.—BLAIR.

THE PEPPER PLANT.

In a recent sketch of the natural productions of Sumatra, pepper was noticed as one of the most important and abundant articles of commerce, and as the many interesting details connected with its culture could not properly be introduced into a general sketch, they were reserved for the present article.

The pepper vine is in its own climate a hardy plant. It can be easily propagated from cuttings or layers, and rises in several knotted stems twining round any neighbouring support, and adhering to it by fibres that shoot from every joint at intervals of from six to ten inches. If suffered to run along the ground, these fibres become roots, but in such cases it bears no fruit, a prop being necessary to encourage it to throw out its bearing shoots. It climbs to the height of about twenty-five feet, but thrives best when restrained to twelve or fifteen, as in the former case the lower part of the vine bears neither leaves nor fruit, whilst in the latter it produces both from within a foot of the ground. The stalk soon becomes woody, and in time acquires considerable thickness. The leaves are of a deep green, and glossy surface, heart-shaped, and pointed; they have but little smell, and are not pungent to the taste. The branches are short and brittle, not projecting above two feet from the stem, and separating readily at the joints. The blossom is small and white; the fruit, which is round, is green when young and full grown, but turns to a bright red when ripe and in perfection. It grows abundantly from all the branches, in long small clusters of twenty to fifty grains, somewhat resembling bunches of currants, but with this difference, that every grain adheres to the common stalk, which occasions the cluster of pepper to be more compact, and less pliant.

In the cultivation of pepper, success depends greatly on the choice of the proper site for the plantation. Level ground, lying along the banks of rivers or rivulets, is usually preferred, provided they are not liable to inundation; the soil in such places is generally rich, and convenience of water carriage is secured. The planters depend more upon the natural qualities of the soil, than on any advantage it might receive from their cultivation, and often select those spots which having been covered with old woods, and long fertilized by decaying foliage and trunks, afford the certainty of an abundant produce.

In the formation of the pepper plantations or gardens, as they are called, the ground is marked out in the form of a regular square or oblong, with intersections throughout at the distance of six feet, which is the usual interval between the plants. The number of plants in a garden may vary from five hundred to one thousand. Industrious or rich proprietors sometimes have gardens of two or three thousand vines. A border, twelve feet in width, within which no tree is suffered to grow, surrounds each garden, and it is commonly separated from others by a row of shrubs or irregular hedge. Where the nature of the country admits of it, all the gardens of a village lie adjacent to each other, both for the convenience of mutual assistance in labour, and mutual protection from wild beasts, single gardens being often abandoned from fear of their ravages, for where the owner has been killed in such a situation, none will venture to replace him. After lining out the ground, and marking the intersections by slight stakes, the next business is to plant the trees that are to become props to the pepper, as the Romans planted elms, and the modern Italians commonly plant poplars and mulberries, as supports for their grape vines. For this purpose the Sumatrans employ cuttings of a tree called chingkariang, or chinkareen: it is ready and quick of growth if put into the ground after the first rains, and it is armed with little thorns, which enable the vine to take a firmer hold. The shade of this tree affords a useful protection to the pepper plant which it supports, but as it grows rapidly it requires to be lopped and pruned.

The usual mode of propagating the pepper is by cuttings a foot or two in length, taken from the horizontal shoots that run along the ground from the foot of the old vines. These are planted with cuttings of the chinkareen. Between the second and third year of its growth the pepper plant begins to show its blossoms. In the rainy season that succeeds the first appearance of the fruit, the whole vine is loosened from the chinkareen, and turned down again into the earth, a hole being dug to receive it, in which it is coiled, leaving only the extremity above ground, at the foot of the chinkareen, which it now re-ascends with redoubled vigour, attaining in the following season a height of eight or ten feet, and bearing a full crop of fruit. From this time the produce increases annually for three years, when the garden, about the seventh or eighth year, is esteemed in its prime, or at its utmost produce, which state it maintains according to the quality of the soil, from one to four years, when it gradually declines, for about the same period, until it is no longer worth the labour of keeping it in order. On the first appearance of decline, another garden should be planted to succeed it, which will begin to bear before the old one ceases to be productive.

The pepper vine climbs to the height of twenty feet, but bears most abundantly when restrained to the height of twelve feet; it therefore requires, from time to time, a careful pruning; suckers, or superfluous side shoots, which spring luxuriantly, must be plucked away. The ground of the garden must be carefully weeded of whatever might injure, or tend to choke the plants. During the hot months the finer kinds of grass are permitted to cover the ground, as they contribute to mitigate the effects of the sun's power, and preserve for a longer time the dews, which at that season fall copiously. In lopping, or pruning the trees, as well as in gathering the fruit, light triangular ladders made of bamboo are employed.

As soon as any of the berries or corns redden, the bunch is reckoned fit for gathering, the remainder being then generally full grown, although green. It would not answer to wait for the whole to change colour, as the most mature would drop off. The bunches are collected in small baskets slung over the shoulder, and conveyed to a smooth level spot of clean hard ground, and spread on mats to dry in the sun, but at the same time exposed to all the vicissitudes of the weather, which are not thought to injure the pepper. In this situation it becomes black and shrivelled, as we see it in Europe. As the bunches dry they are hand-rubbed occasionally, to separate the grains from the stalk. The pepper is then winnowed in large shallow sieves, and put into large vessels made of

bark, until a sufficient quantity is collected for carrying to the European factory at the mouth of the river. That which has been gathered at the proper stage of maturity will shrivel the least; but, if plucked too soon, it will, in a short time, by removal from place to place, become mere dust. Of this defect trial may be made by hand; but as light pepper may have been mixed with the sound, it becomes necessary that the whole should be garbled, at the scale, by machines constructed for the purpose. Pepper that has fallen to the ground over-ripe, and been gathered from thence, will be known by being stripped of its outer coat, and in that state is an inferior kind of white pepper.

Generally speaking, the pepper vines produce two crops in the year; one called the greater crop, between October and March; the other, the lesser or half-crop, between April and September, which is small in proportion as the other has been considerable, and *vice versâ*.

White pepper was long supposed in Europe to be the produce of a different plant, and to possess superior qualities to those of the common black pepper: and, accordingly, it was sold at a considerably higher price. White pepper, however, is produced by depriving black pepper of its exterior pellicle. For this purpose, the ripest red grains are picked out and put in baskets to steep, either in running water, or in pits dug for the occasion near the banks of rivers, or in stagnant pools. Sometimes it is only buried in the ground. In any one of these situations it swells, and in the course of a week or ten days bursts its tegument, from which it is afterwards carefully separated by drying in the sun, rubbing between the hands, and winnowing.

The gardens being planted in even rows, running parallel, and at right angles with each other, their symmetrical appearance is very beautiful, and rendered more striking by the contrast they exhibit to the wild scenes which surround them. In highly cultivated countries, such as England, where landed property is all hired out, and bounded and intersected with walls and hedges, we endeavour to give our gardens and pleasure grounds the charm of variety and novelty, by imitating the wildness of nature, in studied irregularities. Winding walks, hanging woods, craggy rocks, falls of water, are all looked upon as improvements; and the stately avenues, the canals, and rectangular lawns of our ancestors, which afforded the beauty of contrast, in ruder times, are now exploded. This difference of taste is not merely the effect of caprice, nor entirely of refinement, but results from the change of circumstances. A man who should attempt to exhibit in Sumatra, the modern, or irregular style of laying out grounds, would attract but little attention, as the unimproved scenes adjoining on every side would probably eclipse his labours. Could he, on the contrary, produce, amidst its magnificent wilds, one of those antiquated parterres, with its canals and fountains, whose precision he has learned to despise, his work would create admiration and delight. A pepper garden cultivated in England would not, in point of external appearance, be considered as an object of extraordinary beauty, and would be particularly found fault with for its uniformity; yet in Sumatra, I never entered one after travelling many miles, as is usually the case, through the woods, that I did not find myself affected with a strong sensation of pleasure. Perhaps the simple view of human industry, so scantily presented in that island, might contribute to this pleasure, by awakening those social feelings that nature has inspired us with, and which make our breasts glow on the perception of whatever indicates the prosperity and happiness of our fellow-creatures*.

The pepper is mostly brought down from the country on rafts, which are sometimes composed of rough timbers, but usually of large bamboos, with a platform of split bamboos, to keep the cargo dry. In the more rapid rivers they are steered at both head and stern with a kind of rudder, or scull with a broad blade, fixed in a fork or crutch. Those who steer are obliged to exert their utmost strength, especially in those places where the fall of water is steep and the course winding; but the purchase of the scull is of such great power that when both ends are acted upon at the same time, they can move the raft bodily across the river: but, notwithstanding their great dexterity and judgment, they are liable to meet with obstruction in large trees and rocks, which, from the violence of the stream, occasion their rafts to be overset, and sometimes dashed to pieces.

It is a common opinion that pepper is not damaged by immersion in sea-water; a circumstance that attends, perhaps, a fourth part of the whole quantity shipped from the coast of Sumatra. The surf, through which it is carried in an open boat, renders such accidents unavoidable. This boat, which carries one or two tons, being hauled up on the beach, and there loaded, is shoved off with a few people in it, by a number collected for that purpose, who watch the opportunity of a lull, or temporary intermission of the swell. A long narrow vessel (peculiar to the southern part of this coast) of about ten or twenty tons' burden, lies at anchor without, to receive the cargoes from the boats. At many places where the mouths of the rivers are tolerably practicable, the pepper is sent out at once in these vessels over the bar; but this, owing to the common shallowness of the water and the violence of the surfs, is attended with considerable risk. Thus the pepper is conveyed, either to the warehouses at the head-settlement, or to the ship from Europe lying there to receive it.

* MARSDEN'S *History of Sumatra*, from which valuable work the details of this notice have been abridged.

TO A BUTTERFLY.

EMBLEM of life beyond the mouldering grave!
I love to see thy golden pirions wave
In the bright beams the glorious Summer sheds;
I love to see thee kiss the bending heads
Of every flower that springs from out the earth,
Like spirit hailing those of kindred birth,
Retaining in its glorified estate
The earth-born feelings of its former fate.
Though the blue fields of air and sky invite
The upward winging of thy daring flight,
Though on thy new and fresh awaken'd glance
Ope the bright prospects of the heaven's expanse,
Still by affection thy soft wings are curl'd,
And Love still clingeth to this nether world.
Bright art thou now, and yet but yesterday
Child of the worm, companion of the clay,
A crawling reptile fetter'd to the soil,
A loathsome grub condemn'd to ceaseless toil,
By earthy chains held fast, unfit to rise,
And reckless of thy future home, the skies.
And thou didst die, a chrysalis thy tomb,
And erring mortals, hopeless, call'd thy doom,
And spurn'd thee as a useless thing of nought,
Senseless, unworthy even a passing thought.
But the bright sun a genial influence shed
And woke new life within thy earthy bed,
Thy prison burst, thy fetters sunk away,
And thy bright form sprung forth to gladden day.
Behold the grave where youth and beauty sleep,
Or tomb where widows wail and orphans weep,
The urn that holds what wisdom erst adorn'd,
The mouldering forms that once with feeling burn'd:—
Behold,—but grieve not,—they shall also wake
And like this emblem* forms more glorious take.
The Sun of righteousness shall yet illume
The midnight darkness of the silent tomb,
The icy fetters of the grave be riven
And the free spirit wake to light and heaven.

* It is worthy of remark that the butterfly was the Egyptian emblem of immortality.

THE way to Heaven is the same from all places, and he that has no grave has the heavens still over him.—TRAVELLER.

WISDOM is a pearl with most success
Sought in still water, and beneath clear skies.—COWPER.

LETTERS TO THE READER.

No. IX.

The sun is careering in glory and might,
Mid the deep blue sky and the cloudlets white,
The air and the water dance, glitter, and play,
And why should not I be as merry as they?
The linnet is singing the wild wood through,
The fawn's bounding footstep skims over the dew;
The butterfly flits round the flowering tree;
And the cowslip and blue-bell are bent by the bee,
All the creatures that dwell in the forest are gay,
And why should not I be as merry as they?

So sings, dear reader, the poet of inanimate nature; the historian of the poor replies, that, so long as the condition of the labouring classes of this country is not in keeping with the cheerfulness of the general creation, it will be more becoming for such as are not the actual sufferers, rather to study how to assuage the evils of our fellow-men, than to appropriate the smiles of nature to themselves. If an increased flow of animal spirits be the first and natural effect of these smiles upon our life, their deeper meaning would seem to teach s the happiness of reflecting upon some other than self the rays of gladness we receive. Sombre colours absorb the sun-beams, the rest are brilliant in proportion to the amount of heat and light which they radiate. Let us hence learn the greater blessedness of giving—talents, time, and means,—over the m re reception of instinctive pleasure.

In my last letter at page 71, I began an analysis of the recent *Reports upon the Employment of Women and Children in Agriculture*. After paying a visit to the hop-ground and dairy we will now follow the labourers home to discover whether their social lot be worthy of the subjects of a powerful and Christian country.

There is, perhaps, no produce in the country that requires so much, or such varied, human labour as the hop at the different periods of its progress. The ground is at one time of the year a field, at another a garden. Great outlay of force must be expended on the soil, as on the corn land; but the force is that of the human arm, not of the beast of burden, which into some plantations, as those about Farnham, in Surrey, scarcely enters. Unlike corn, too, and other produce, which, when the soil has been prepared, and the seed committed to the ground, is left in the main to the course of nature and the order of the seasons to bring to perfection, it must be trained and tended from its first shoot to its ripening. Then it is not gathered like corn, and stored upon the stalk, but is culled at once by the finger. It thus levies its tax of labour upon all ages and either sex; the soil is handled and subdued by the man; the plant is tended and trained by the woman; in the gathering are united all—man, woman, and child.—Mr. Vaughan's *Report*.

As soon as the hop-bind has shot from the ground, the process of tying commences. This task is performed by women through Sussex, Surrey, and Kent, at the beginning of May, or latter end of April, who usually contract with the farmer to tie for the season at nine shillings per acre. They will generally take two acres, or two and a half. The trouble depends on the weather; if that be boisterous, the women have to bind them over and over again, as the wind blows them from the pole, or round in a wrong direction away from the sun.

We cannot boast of our vineyards; but we question whether Italy itself can show a more beautiful or picturesque scene than an English hop-garden in *picking times*. The hops, which have luxuriantly climbed to the very top of their poles, hang on all sides their heavy heads of scaly flowers in festoons and garlands, and the groups of pickers, seated in the open air beneath the clear lustre of an autumnal sky,—age in its contentment, and youth in its joy,—and the boys and girls which carry to them the poles, covered with all their nodding honours, may match, for objects of interest, the light forms and dark eyes of Italy.—*Book of the Seasons*.

Hop-picking begins generally about the second week in September, and furnishes occupation for women and children of all ages. A woman can pick rather more than a man within the same space of time. Girls do little or nothing except assist at picking. The fruit is culled and dropped into bins which stand in the gardens. The better the crop, the less money is given for picking the same quantity; 1842 was an average year. A good labourer would then have picked twenty bushels in the day, or more; an active child of twelve years old could gather about twelve or thirteen bushels.

The larger hop districts are exposed to an immigration of mixed labourers, which are apt for the time to interfere with the comfort, if not unsettle the habits, of the permanent residents. The fixed population of Farnham, in Surrey, amounts to seven thousand; as many as five thousand strangers are added to these during the picking season. The occasional labourers chiefly come from towns and villages within twenty miles of Farnham; some few are from a greater distance: and others, amongst whom are gipsies, have no settled home. The great want of cleanliness, the improvident and frequently dissolute habits of these wanderers, render them but too often unfit associates for the women and young persons engaged in the same occupation. If at the outset we dreamt that our own land possessed an equivalent to the charms of Italian vineyards, we have now to lament the absence of that sober cheerfulness, and humanity of joy, which may be seen and felt in every group of southerns.

A similar population is annually poured into the neighbourhood of Rye, in Sussex. The accommodation that is obtained by the new comers is necessarily bad in places that are already destitute of proper shelter for the poor. William Waters, one of these travellers for work, deposed as follows;

I live at Brockham, in Surrey. From want of work I left my house locked up after last harvest, and went with wife and children to the village of Hightham, between Sevenoaks and Maidstone, to help to gather hops. We were away from home one month, and lodged at the hop-houses, built to receive those who cannot afford to hire lodgings. *The houses in which we were placed had no chimneys nor windows; we were provided with straw and hurdles, by which we fenced ourselves off from two other families in the same building.*

The severest labour performed by women, connected with agriculture, is in the dairy farms. A Worcestershire dairyman writes:

I have a farm of three hundred and sixty acres, about eighty of which are occupied by the dairy-cows during the summer, and seventy or eighty mown to supply them with hay. I keep from forty to forty-five cows. From April to November there is most to do in a dairy-farm; May and June are the busiest time. As far as the woman superintending the dairy is concerned, the first thing done in the morning is to skim the milk, empty the skimmed milk into the cheese-tub, and prepare the milk vessels for the new milk, which is brought into the dairy by five or six o'clock; after which, with the assistance of her servant, she prepares a portion of the skimmed milk for the calves, and makes the remainder into cheese. Two days a-week she has butter to make, two days she goes to market, and the other two she is occupied in the cheese-room. These different matters occupy the middle of the day. In the evening the milk is to be skimmed, and the new milk put into its proper vessels, and the calves to be again attended to. She is occupied about twelve hours, not including meal-time. Her wages are 55*l*. per year, for herself and servant, besides a supply of coals, vegetables, milk, and beer. Her servant, or the dairy-maid, is occupied the whole day in the dairy, except two hours for milking. Her work is even more laborious than the superintendent's, and is continued during twelve or fourteen hours.

Dr. Greenup, of Calne, Wiltshire, says that the only bodily ailments that he has found peculiar to agricultural females are rheumatism, in such as are much exposed to wet, and amongst dairy-servants, pains in the back and limbs, overpowering sense of fatigue most painful in the morning, want of appetite, feverishness, &c.

The wages received by women, for agricultural labour, vary much according to their strength of body, capacity

for work, and the regularity with which they can absent themselves from their families. Taking one place with another, women are paid by farmers from seven pence to nine pence a day, for ordinary work; gentlemen generally paying from nine pence to one shilling for the same. In cider counties part of the wages of women is paid in cider of an inferior kind, strong and rough, which is generally consumed by the husband. In the hop counties, the wife's skill in tying, a task which the husband never performs, and her rapidity and adroitness in picking, in which she commonly excels him, add considerably to the income of the family. Thirty shillings in the tying season, and twenty pence a day, as long as the picking of the hops lasts, in addition to her husband's wages, is no extravagant estimate of her earnings.

Cases are mentioned where it is the custom of the farmer to pay wages by cheques upon the miller, or village grocer—a practice fraught with great injustice to the labourer; who, in such a case, is compelled to "take out" so much flour, or grocery, instead of receiving his his pay in full.

A great misfortune to the labourer is the difficulty of expending his earnings to any advantage. The nature of their employment obliges them to dwell often in secluded villages, and at a distance from the larger markets. Consequently, even where the dealings are fair, they are burdened with the intermediate profits of the huckster. There is rarely such competition amongst the petty traders as tends to keep things at their proper level. There is a general ignorance of value on the part of the poor agricultural purchaser. And, moreover, the latter, by obtaining credit, deprives himself of the little power he would otherwise possess of reducing an exorbitant demand, or rejecting a worthless article.

In some places the shops are represented as 25 per cent. dearer than the town shops; in others as 20, in others as 10 per cent. dearer; in all, the articles as inferior; and in most the practice of giving credit is used as a means of exaction. —Mr. Vaughan's *Report*.

Sobriety is one of the foremost virtues of the female farming servant. Wood-stealing is the crime with which she is most frequently charged. The Honourable and Reverend Rector of Bryanston, Dorsetshire, observes,

We are too apt to forget that the poor are often so situated that they have no market within their reach at which they can procure many of the absolute necessaries of life, and this is especially the case with regard to fuel. Unless they have a right of turf cutting, or the proprietors of woods will sell them fuel on the spot, they are often wholly without the means of procuring it honestly. If a market for fuel is within the labourer's reach, I have never found any difficulty in getting him to lay by, in small instalments through the summer, sufficient money to purchase his winter's stock of that article, but the expense of its carriage from any distance, is a complete bar to his obtaining it at all. From no limited experience, I can say that the only way in which wood-stealing can be successfully checked, is by first placing fuel at a fair price within reach of the poor man, and then showing a firm determination to prosecute in every case in which the stealing it is detected.

In nine villages out of ten, (continues the same benevolent writer) the cottage is still nothing but a slightly improved hovel; morality is borne down by the pressure of temptation on minds unfortified by education in good principles, and the wages of the stoutest and most industrious scarce find the coarsest food, the smallest sufficiency of fuel.

In rich men's halls the fire is piled,
And ermine robes keep out the weather;
In poor men's huts the fire is low,
Through broken panes the keen winds blow,
And old and young are cold together.

Oh! poverty is disconsolate!—
Its pains are many, its foes are strong:
The rich man in his jovial cheer,
Wishes 'twas Winter through the year;
The poor man 'mid his wants profound,
With all his little children round,
Prays God that winter be not long!

Mary Howitt.

It will be my object, in the next letter, to bring together the principal means that the most able and self-sacrificing men have set in action against this human suffering, which so contradicts the cheerfulness of external nature. Enough for the present, if I have shown that the beauty of the material universe is broken by the hard lot of those who labour for our food, and manufactured luxuries. By reason of that very labour, they have no time, nor opportunity, nor educated power to provide better things for themselves and families. It is for us, who reap the leisure of their toil, to pay back the debt with thought, at least, and kindly intercourse.

Your sincere friend,

F.

A FIRST NIGHT AT SEA.

To one unaccustomed to such scenes, this is a very striking time on shipboard. Afterwards, and when its novelty had long worn off, it never ceased to have a peculiar interest and charm for me. The gloom through which the great black mass holds its direct and certain course; the rushing water, plainly heard, but dimly seen; the broad, white, glistening track, that follows in the vessel's wake; the men on the look-out forward, who would be scarcely visible against the dark sky, but for their blotting out some score of glistening stars; the helmsman at the wheel, with the illuminated card before him, shining, a speck of light amidst the darkness, like something sentient, and of Divine intelligence; the melancholy sighing of the wind through block, and rope, and chain; the gleaming forth of light from every crevice, nook, and tiny piece of glass about the decks, as though the ship were filled with fire in hiding, ready to burst through any outlet, wild with its resistless power of death and ruin. At first, too, and even when the hour, and all the objects it exalts, have come to be familiar, it is difficult, alone and thoughtful, to hold them to their proper shapes and forms. They change with the wandering fancy; assume the semblance of things left far away; put on the well-remembered aspect of favourite places dearly loved; and even people them with shadows. Streets, houses, rooms; figures so like their usual occupants, that they have startled me by their reality, which far exceeded, as it seemed to me, all power of mine to conjure up the absent; have, many and many a time, at such an hour, grown suddenly out of objects with whose real look, and use, and purpose, I was as well acquainted as with my own two hands.—Dickens.

THE POWER OF NOVELTY.

Events, of which we confess the importance, excite little sensibility unless they affect us more nearly than as sharers in the common interest of mankind. That desire which every man feels of being remembered and lamented, is often mortified when we remark how little concern is caused by the eternal departure even of those who have passed their lives with public honours, and been distinguished by extraordinary performances. It is not possible to be regarded with tenderness except by a few. That merit which gives greatness and renown, diffuses its influence to a wide compass, but acts weakly on every single breast:—it is placed at a distance from common spectators, and shines, like one of the remote stars, of which the light reaches us, but not the heat. The wit, the hero, the philosopher, whom their tempers or their fortunes have hindered from intimate relations, die, without any other effect than that of adding a new topic to the conversation of the day. They impress none with any fresh conviction of the fragility of our nature, because none had any particular interest in their lives, or was united to them by a reciprocation of benefits and endearments. Thus it often happens, that those who in their lives were applauded and admired, are laid at last in the ground without the common honour of a stone, because by those excellencies with which many were delighted, none had been obliged, and though they had many to celebrate, they had none to love them.—Johnson.

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